

Skill Shortages in Washington

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House Higher Education Committee

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Workforce Training and
Education Coordinating Board



Workforce Board Identifies High Employer Demand Fields

- Workforce Board produces a **Joint Report** with SBCTC and WSAC focused on key skill gaps.
 - Working to better define how education/training requirements tie into occupations.
- Also produce annual **Skill Gap Analysis** focused on high-demand jobs that require mid-level training.
- Conduct a statewide **Employer Survey** which highlights occupations facing hiring challenges.
 - Association of Washington Business and WA Chamber of Commerce Executives partners.

Key findings from the Joint Report

■ **Mid-education level**

- Demand significantly exceeds supply in several occupations, such as those related to installation, maintenance and repair.

■ **Baccalaureate level**

- Degree production in STEM fields continues to increase but hasn't caught up with projected demand.

■ **Health Professions**

Significant gaps for mid- and professional levels.

Strong demand projected at all education levels in coming years

| Education/Training Level | Current Completions | Total Annual Completions Needed 2016 through 2021 | |
|--------------------------|---------------------|---|-------------------------------|
| | | Entry Education Level* | Competitive Education Level** |
| Mid-Level | 59,472 | 55,532 | 66,049 |
| Baccalaureate | 32,376 | 37,614 | 45,259 |
| Graduate | 12,155 | 7,710 | 18,218 |

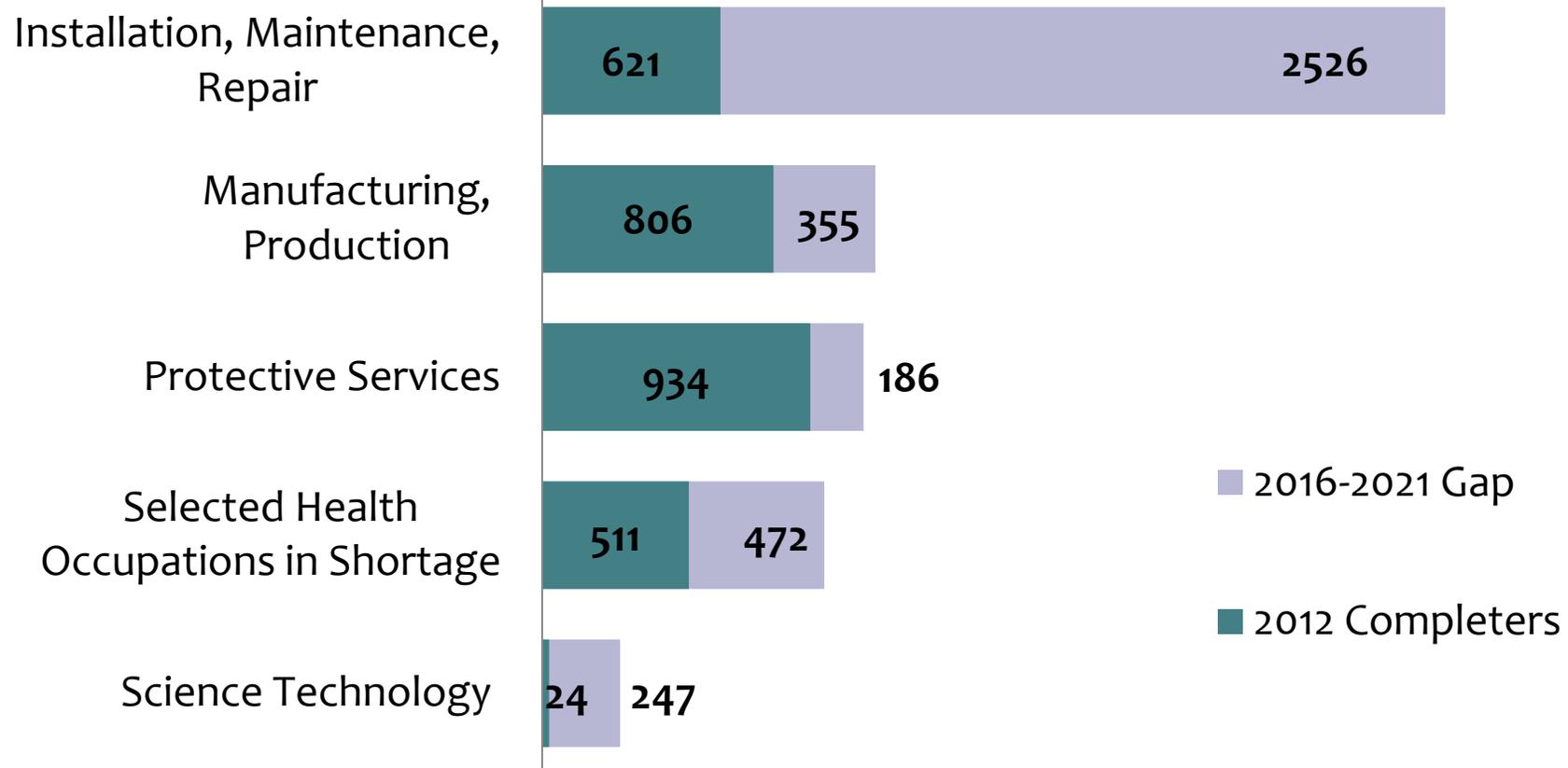
**Entry level as defined by U.S. Bureau of Labor Statistics*

***Actual levels of training/education held by employed workers*

(Source: American Community Survey)

Installation/Repair & Manufacturing jobs face substantial supply shortfalls

Current Supply vs. Projected Demand
for Key Mid-Level Occupations



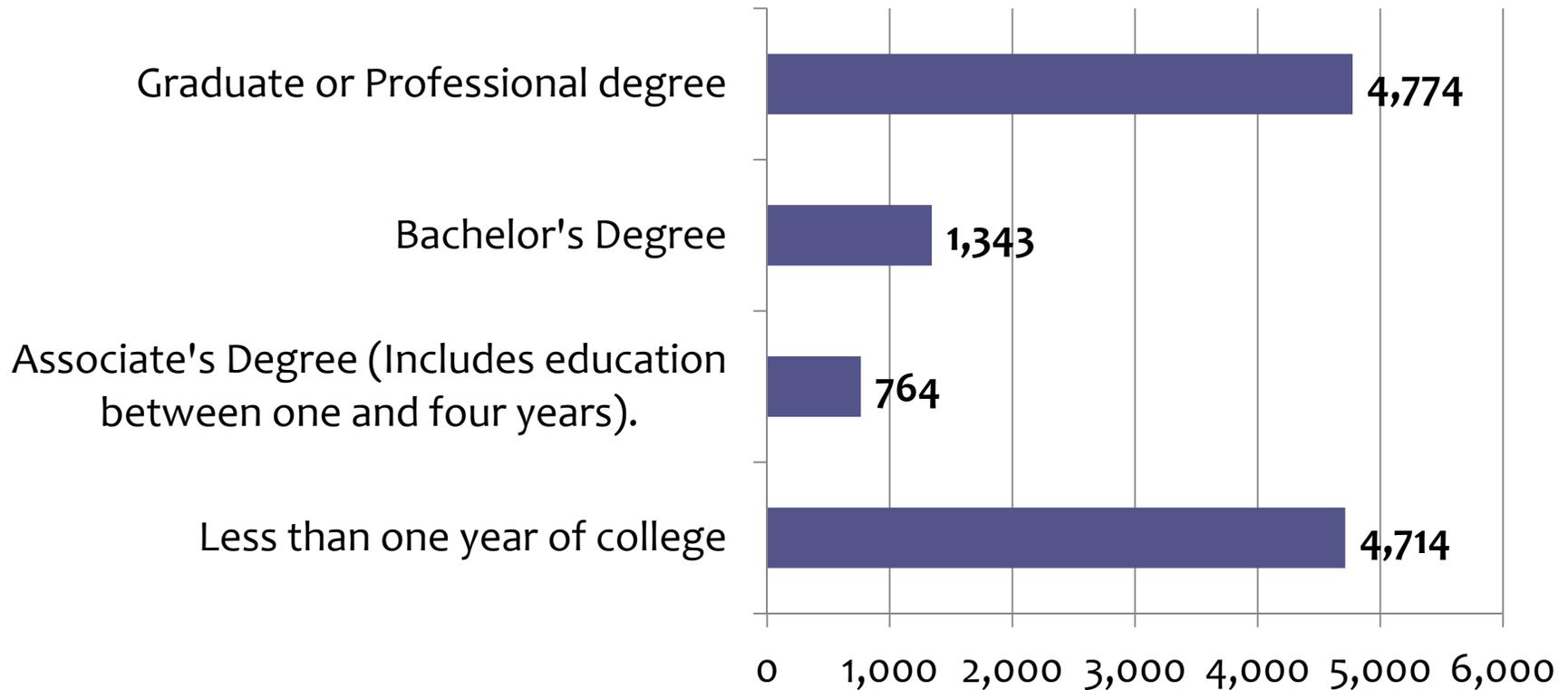
Source: A Skilled and Educated Workforce, Joint Agency Report, 2013

Demand projected to outpace supply for computer/engineering grads

| Field | Current Completions | Total Annual Completions Needed 2016-21 | |
|---|---------------------|---|-----------------------------|
| | | Entry Education Level | Competitive Education Level |
| Computer Science | 1,888 | 4,042 | 4,648 |
| Engineering | 1,432 | 2,467 | 2,506 |
| Research, Science, Tech. | 1,377 | 1,376 | 1,641 |
| Health Professions (Grad/Professional Level) | 1,569 | 1,750 | 2,200 |

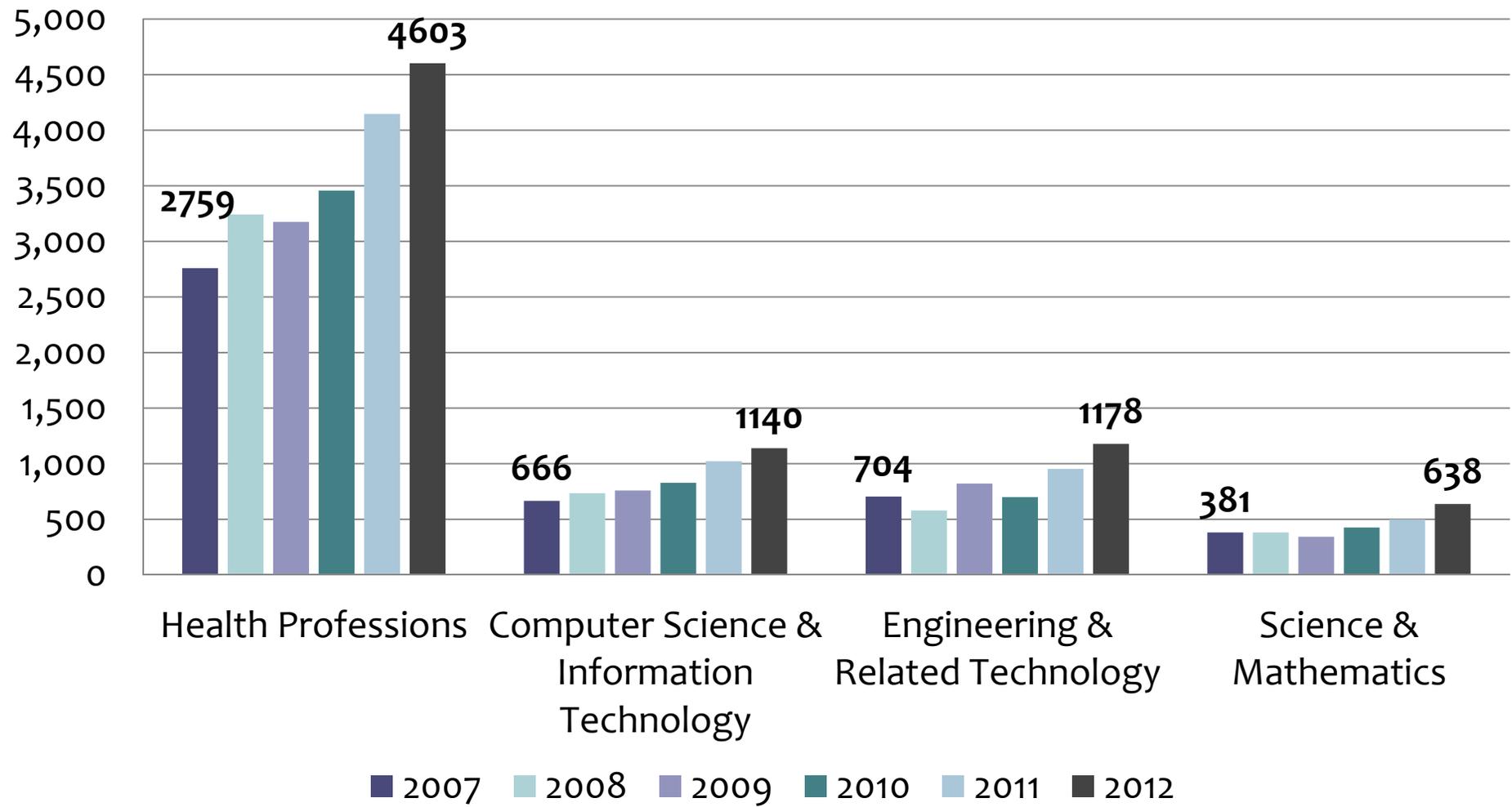
Source: A Skilled and Educated Workforce, Joint Agency Report, 2013

Washington draws newcomers with both high and low education levels



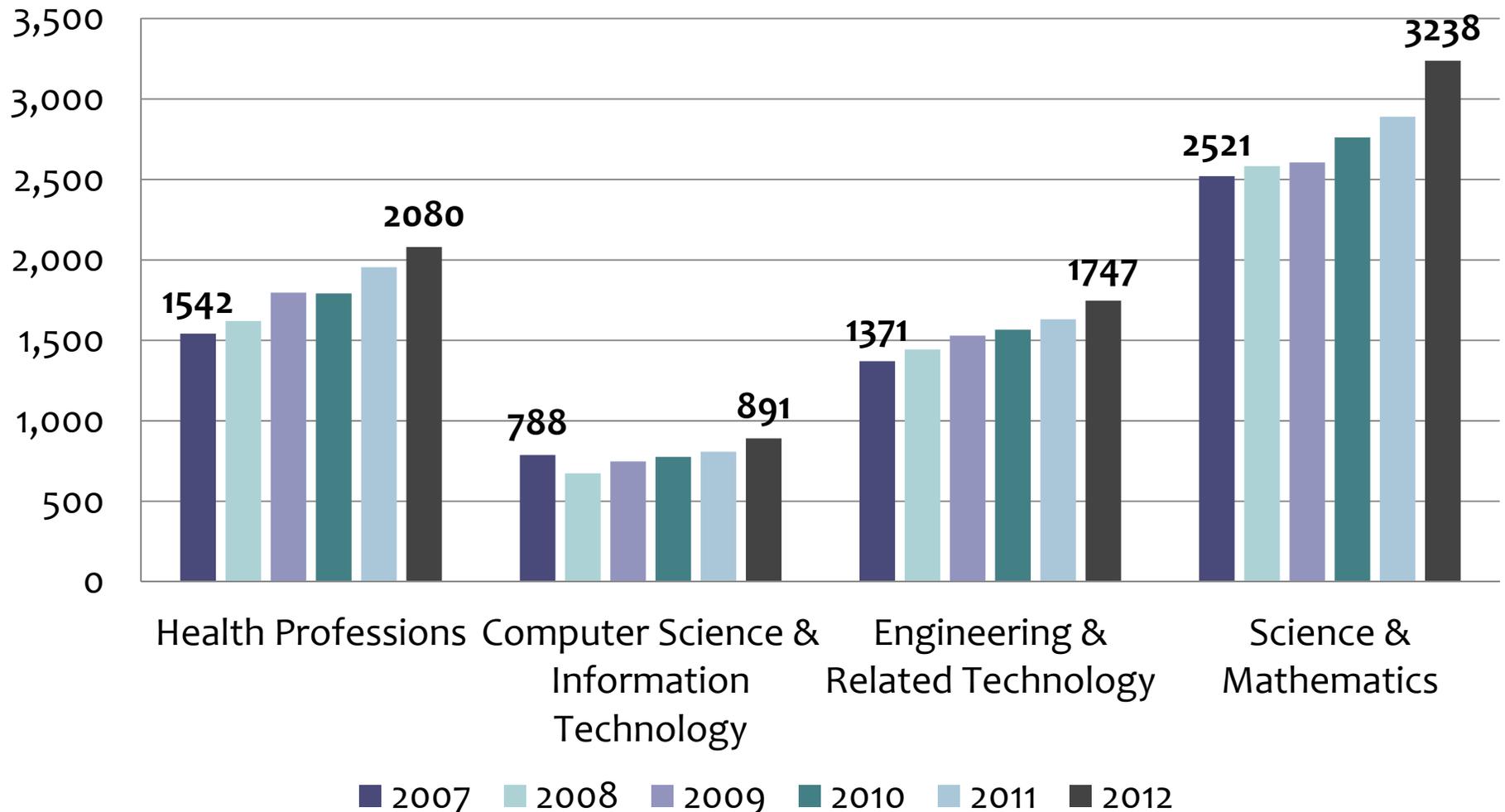
Source: WSAC Staff Analysis of 2009-11 American Community Survey Data, 2009-2011

Associate's degrees: Growth in health profession grads outpaces STEM grads



Source: Integrated Postsecondary Education Data System (IPEDS), 2007-2012.

Bachelor's degrees: Supply of science and mathematics graduates growing faster



Source: Integrated Postsecondary Education Data System (IPEDS), 2007-2012.

Monthly snapshot shows demand for health, computer, & community service specialists

| Occupation | Demand | Supply | Gap |
|--|--------|--------|-----|
| Health Diagnosing and Treating Practitioners | 254 | 33 | 221 |
| Computer Specialists | 239 | 62 | 177 |
| Community and Social Service Specialists | 96 | 62 | 34 |
| Occupational Therapy and Phy. Therapist Assts. | 25 | 3 | 22 |
| Other Sales and Related Workers | 30 | 16 | 14 |
| Supervisors of Food Prep. and Serving Workers | 42 | 29 | 13 |
| Business Operations Specialists | 79 | 70 | 9 |
| Lawyers, Judges, and Related Workers | 10 | 2 | 8 |
| Personal Appearance Workers | 10 | 3 | 7 |
| Mathematical Science Occupations | 8 | 2 | 6 |

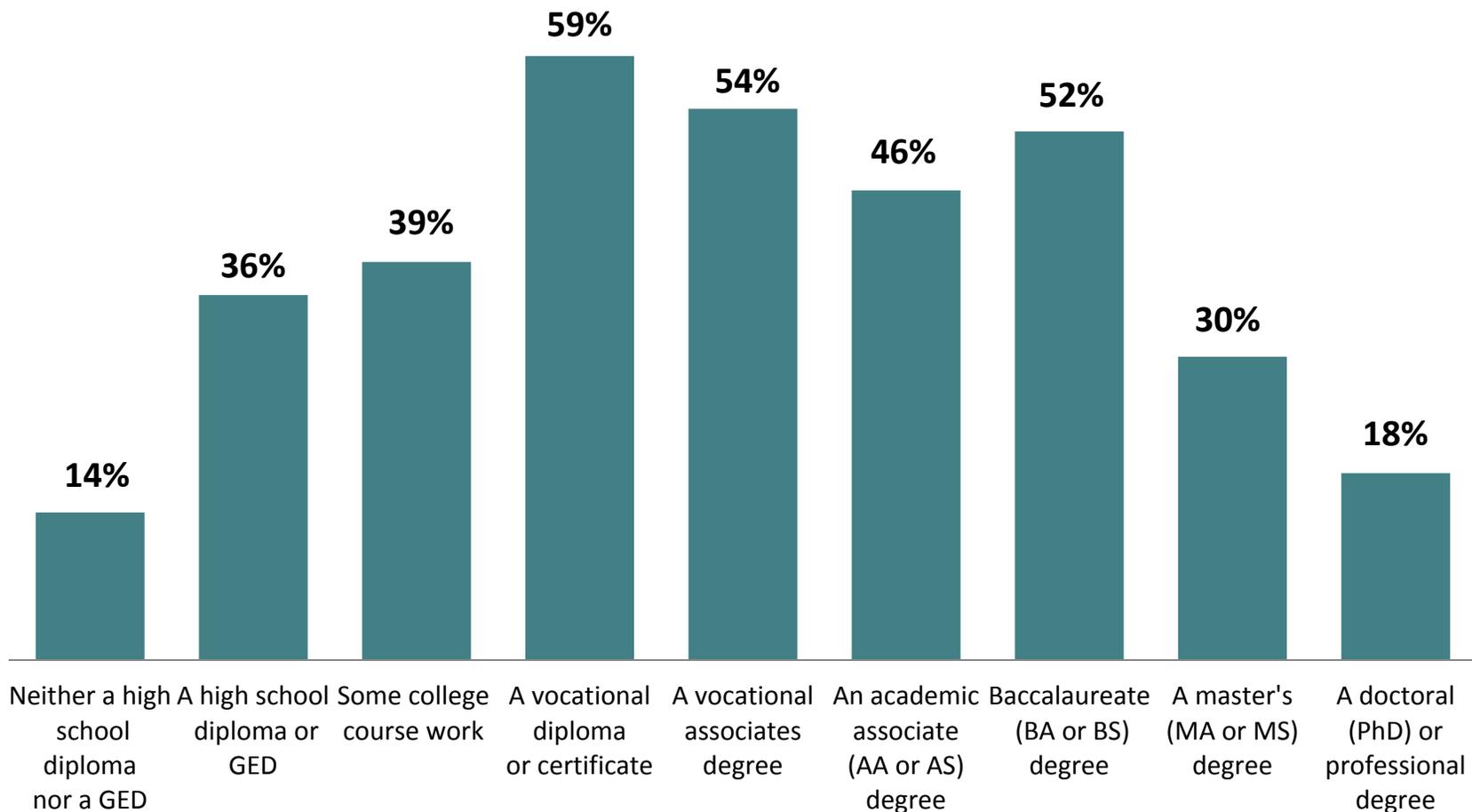
December 2014, Pacific Mountain Workforce Development Area
Includes: Thurston, Mason, Lewis, Grays Harbor and Pacific counties

Source: Washington State Employment Security Department

But the region shows an oversupply of construction & production workers

| Occupation | Demand | Supply | Gap |
|----------------------------------|--------|--------|--------|
| Construction Trades Workers | 50 | 1,225 | -1,175 |
| Other Production Occupations | 14 | 355 | -341 |
| Motor Vehicle Operators | 69 | 376 | -307 |
| Other Installation & Maintenance | 36 | 202 | -166 |
| Food and Beverage Serving | 27 | 184 | -157 |
| Material Moving Workers | 25 | 182 | -157 |
| Information and Record Clerks | 70 | 208 | -138 |
| Retail Sales Workers | 60 | 193 | -133 |
| Cooks and Food Preparation | 26 | 147 | -121 |
| Other Office and Admin. Support | 17 | 135 | -118 |

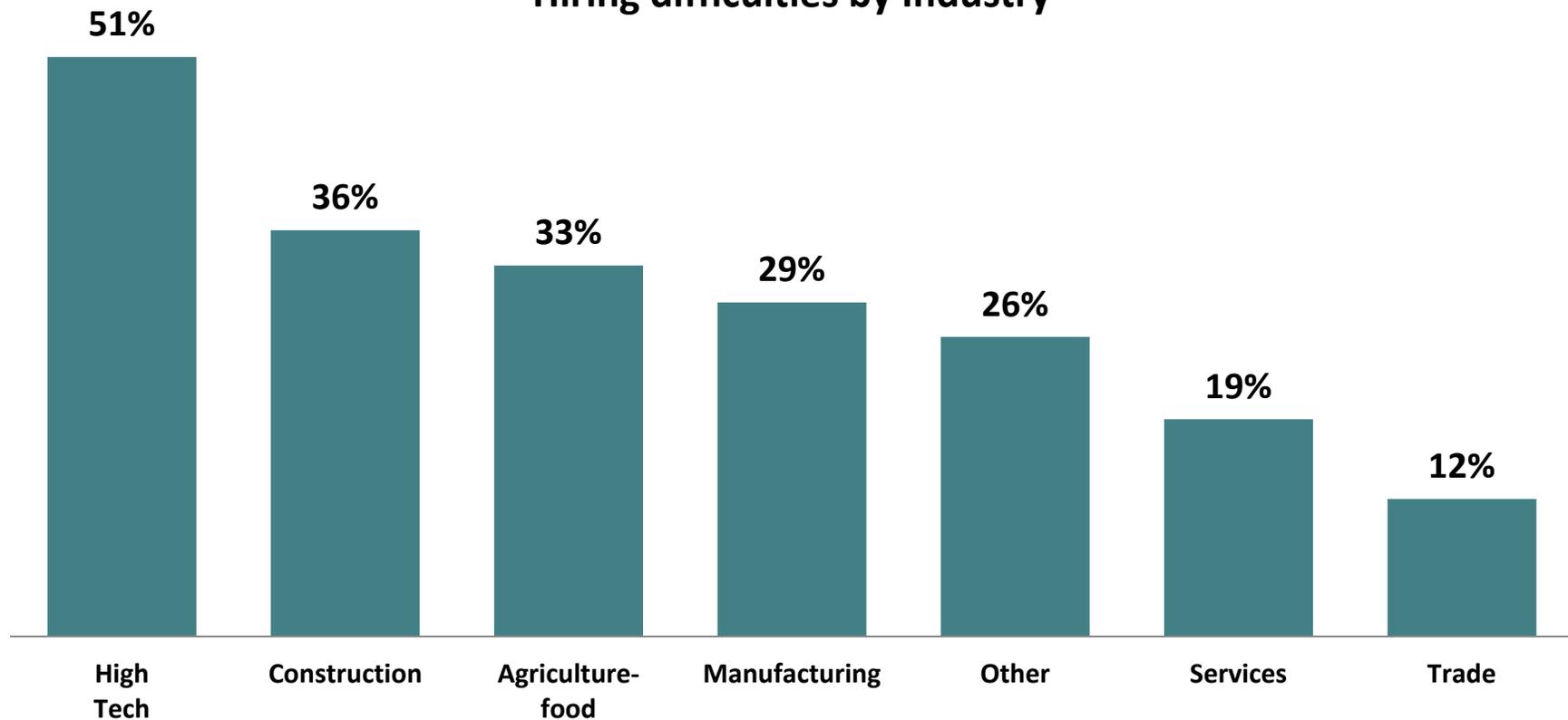
Employer Survey: Hiring most difficult for jobs requiring vocational certificates, degrees



Source: Workforce Board Employer Survey 2012

More than half of employers surveyed had trouble hiring high-tech workers

Hiring difficulties by Industry



Questions?

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